## SUPPORT FOR THE AMENDMENTS

Claims 1-23 are pending. Claim 1 is amended by limiting the substantially linear olefinic hydrocarbon mixture characterized by having at least two of methyl, ethyl, and propyl branches as measured by $^{13}C$ NMR. Support for this amendment is found in paragraphs [0029] and [0030] of the application as originally filed. It is believed that there is no new matter and entry and consideration is respectfully requested.

## REMARKS

Applicants' attorney sincerely thanks Examiner Bullock for the telephone interview on November 27, 2007. The currently amended Claim 1 incorporates the proposed amendment as suggested during the interview. Applicants respectfully request the Examiner to reconsider claims 1-23 in view of the following remarks.

The amended claim 1 is further limited by the substantially linear olefinic hydrocarbon mixture characterized by having at least two of methyl, ethyl, and propyl branches.

### Nowhere in EP '310 and WO 020 Teaches "oligomer products having at least two of methyl, ethyl, and propyl side groups"

The EP '310 reference discloses a process for oligomerizing a lower olefin feedstock to produce substantially liner hydrocarbons of higher molecular weight than the feedstock by contacting ZSM-23 which is surface deactivated with a surface deactivating agent 2,4.6-collidine and the olefin feedstock comprises $C_2$-$C_{10}$ olefins. The EP '310 reference also discloses a mixture of liquid hydrocarbon products formed comprising at least 95% by weight of mono-olefins oligomers having at least 12 carbon atoms having an average of from 0.80 to 2.00 methyl side groups per carbon chain, said olefins not having any side groups other than methyl. The WO '020 reference discloses a process for oligomerization of $C_2$-$C_{12}$ alkenes comprising contacting an alkene-containing feedstock having a water content of from 0.05 to 0.25 molar %, with zeolite catalyst.

Applicant notices that nowhere in WO '020 teaches surface deactivated ZSM-23. Also, nowhere in WO '020 teaches a linear olefinic hydrocarbon mixture having any side groups other than methyl. The WO '020 was applied for the teaching of hydrating the feed in an oligomerization process to achieve increased yields and increased catalyst life. Hence, the combination of references, even if proper, would result in an oligomerization process to achieve increased yields and increased catalyst life and a product not having any side groups other than methyl.

**Unexpected Results**

Assuming *arguendo* the Examiner has established a proper rejection under 35 U.S.C. 103(a), and Applicant maintains no such rejection has been made, the showing of unexpected superior results in the specification is sufficient to rebut the rejection.

Applicant believes that the resulting product having at least two of methyl, ethyl, and propyl branches is a surprising result in view the disclosure from both references cited by the office actions because as stated above that the combination of references would result in an oligomerization process to achieve increased yields and increased catalyst life and a product not having any side groups other than methyl.

For these reasons, Applicants urge that the present application is in condition for allowance. Early indication of such is earnestly solicited.

The Commissioner is hereby authorized to charge any additional fees that are required or credit any overpayment to Deposit Account No. 05-1712.

Respectfully submitted,

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Date

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